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# TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

(to be used for all correspondence after initial filing)		Application Number	10/531,971
		Filing Date	April 20, 2005
		First Named Inventor	Young-Hyeon Kwag
		Art Unit	1632
		Examiner Name	Not yet known
Total Number of Pages in This Submission	5	Attorney Docket Number	55198.3

## ENCLOSURES (check all that apply)

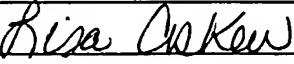
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below); <b>Response To Notification To Comply With Requirements For Patent Applications Containing Nucleotide And/Or Amino Acid Sequence Disclosures; Copy of Notice; return postcard</b>
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks:	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Blackwell Sanders Peper Martin, LLP		
Signature			
Printed Name	Mark E. Stallion		
Date	November 14, 2005	Reg. No.	46,132

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.  
Express Mail Label No.: EV 554058020 US

Signature			
Typed or printed name	Lisa Askew	Date	November 14, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

REC'D CT/PTO 14 NOV 2005

PATENT  
55198.3

#5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Young-Hyeon Kwag :  
Serial No.: 10/531,971 : Examiner: Not yet known  
Filed: April 20, 2005 : Group Art Unit: 1632  
For: MICROORGANISM PRODUCING : Attorney Docket No.: 55198.3  
5'-XANTHYLIC ACID : Customer No.: 027128  
Last Office Action: September 23, 2005 : Confirmation No.: 5808

**RESPONSE TO NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR**  
**PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID**  
**SEQUENCE DISCLOSURES**

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification To Comply With Requirements For Patent Applications  
Containing Nucleotide And/Or Amino Acid Sequence Disclosures mailed September 23, 2005,  
Applicant's respectfully submits the following remarks as set forth herein.

Application of: Young-Hy  Kwag  
Serial No.: 10/531,971  
Response

Rec'd PCT/PTO 14 NOV 2005

REMARKS

The following remarks are provided in response to the Notification mailed September 23, 2005.

Applicant respectfully submits that sequence listings are only required if unbranched sequences of four or more amino acids or unbranched sequences of ten or more nucleotides are disclosed. However, this requirement does not appear to be applicable in the pending application because both 5'-xanthyllic acid and its product 5'-guanylic acid are known compounds and not generally referred to by gene sequence.

A copy of the Notification To Comply With Requirements For Patent Applications Containing Nucleotide And/Or Amino Acid Sequence Disclosures is enclosed herewith. The Applicant respectfully requests that the Notification To Comply be withdrawn.

If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding the present amendment, it is respectfully requested that the Examiner please telephone Applicant's undersigned attorney in this regard.

Respectfully submitted,



Mark E. Stallion  
Reg. No. 46,132  
Blackwell Sanders Peper Martin LLP  
720 Olive Street, Suite 2400  
St. Louis, MO 63101  
314-345-6000  
ATTORNEYS FOR APPLICANT

Date: Nov 14, 2005



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
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[www.uspto.gov](http://www.uspto.gov)

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/531,971	Young-Hyeon Kwag	55198.3

27128  
 BLACKWELL SANDERS PEPER MARTIN LLP  
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 ST. LOUIS, MO 63101

## DOCKETED

OCT 01 2005

INTERNATIONAL APPLICATION NO.

PCT/KR03/02704

I.A. FILING DATE

12/10/2003

PRIORITY DATE

12/11/2002

CONFIRMATION NO. 5808

371 FORMALITIES LETTER



\*OC000000017088787\*

Date Mailed: 09/23/2005

BLACKWELL SANDERS  
PEPER MARTINNOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS  
CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- This application clearly fails to comply with the requirements of 37 CFR 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the application. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

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SEP 3 2005

Rec' PCT/PTO 14 NOV 2005

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice MUST be returned with the response.*

BARBARA A CAMPBELL

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Telephone: (703) 308-9140 EXT 217

PART 1 - ATTORNEY/APPLICANT COPY

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U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/531,971	PCT/KR03/02704	55198.3

FORM PCT/DO/EO/922 (371 Formalities Notice)